Research Department
Federal Reserve
Bank of
San Francisco

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Weekly Letter

Evergreen Industry

Department stores and similar retailers ring up one-sixth or more of their annual sales during the brief Christmas season—but another sector relies on the Christmas season for 100 percent of its annual sales. We're referring, of course, to the Christmas-tree industry—an industry which brings joy to the young and solace to the old, and as a bonus, produces enough oxygen for eight million people every day.

This $300-million industry is concentrated near the Canadian border—primarily the Great Lakes states and the Northeast and Northwest border states—although growers can be found in almost every part of the country. About 12,000 people work full-time as growers, wholesalers and retailers, but another 100,000 (mostly part-time student workers) help out during the spring planting, summer pruning, and fall harvesting seasons. And another 30,000 retailers can be found in December on practically every vacant lot throughout the nation, helping harried husbands and wives make one of their most important decisions of the year from a selection of about 35 million trees.

Adam and Eve to Coolidge

The origins of this industry are wrapped in antiquity. Primitive cultures attributed godlike powers to trees that remained green in winter, because they seemed to guarantee the return of vegetation to desolate gray forests. In mediaeval times, the actors in the miracle plays held in front of churches on December 24 (Adam and Eve Day) used a standard prop—a "Paradise tree," which was an evergreen decorated with apples. And eventually, by the early 16th century, decorated evergreen trees became fairly common in Germanic countries.

Martin Luther may be considered the father of the modern industry. According to pious legend, Luther was out walking one starlit night in 1536, when the stars gave him the idea of putting numerous candles on a fir tree to impress his son with the message that the Christ child was the light of the world. (Modern fire marshals would frown on his approach.) Also, according to legend, Hessian soldiers introduced the Germanic custom into this country, although their attempts at decorating a tree at Trenton in 1776 were ruined by a Scrooge named George Washington.

The modern popularity of the Christmas-tree celebration may be traced back to the famous style-setter, Prince Albert, who introduced the custom into England after he married Queen Victoria. His example, and the efforts of German settlers in this country, increased the popularity of the custom throughout the 19th century. In the early days, most trees were decorated with home-grown goodies—such as cookies, apples, cranberries, and pine cones—but German-made decorations became the rage after their introduction in the 1880's.

Franklin Pierce introduced the Christmas tree into the White House in 1856, and the custom was interrupted only once thereafter, by a Scrooge named Theodore Roosevelt. TR, an ardent conservationist, was alarmed because roughly half the trees in the country had been cut down by the time of his Administration, and he feared that the Christmas-tree industry would remove the rest. But his Chief Forester, Gifford Pinchot, argued that there would be no danger with proper reforestation, and he was proven right over the next several decades—with the help of the other Roosevelt, who was a noted tree farmer on his Hyde Park estate. Meanwhile, in 1923, Calvin Coolidge established the Christmas-tree lighting ceremony at the White House, in what was perhaps the most notable achievement of his presidency.

Growing trees

Growers plant about 90 million seedlings an-

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nually to ensure the harvest of about 35 million trees each year. Producers mostly grow their trees in rural areas on soil which is unsuitable for other types of crops and on slopes which are too steep for agricultural production. The trees help prevent erosion, provide a habitat for wildlife, and of course improve the scenery. But life is not always evergreen for producers, because of ever-present problems with insects and diseases. This year they had to worry about the Midwestern drought, and in several preceding years they found many of their stands quarantined because of the spread of the dreaded scleroderris canker. And growers also worry about "night crawlers"—the visitors who climb fences at night and cart off the best specimens.

Producers count on a 6-to-12 year growing cycle, depending on the species and region of the country. Each year they replant a number of two-year old seedlings in thin sandy soil, and then carefully tend the trees for the next several years. By holding back rapid upward growth, the grower can encourage each tree to branch more quickly, and gradually achieve the full bushy appearance that people prefer in Christmas trees. An important step is the annual shearing, which develops thick branches and the desired triangular shape. This work begins when each tree is three years old, and continues until the harvest. And many growers help to ensure the industry's evergreen character by spraying the trees green, since many pines lose their bright green color when they become dormant each fall.

Investing in trees

Roughly 85 million trees are now under management on some 450,000 acres throughout the country. Tree farms range in size from 50 to 5,000 trees, with most producers raising between 800 and 1,500 trees each. Cost studies show that a total investment of about $3.25 per tree is needed to develop a 6½-foot sheared Douglas fir during a seven-year rotation. That means an investment of $4,225 an acre, on the basis of a normal stocking of 1,300 trees an acre.

About one-half of the investment is in terms of personal labor—what the small operator can perform by himself. The balance of the investment includes out-of-pocket costs for part-time help, planting stock, tools, chemicals, and of course taxes. If the trees are sold wholesale at roadside for $1.00 per lineal foot—or $6.50 for a 6½-foot tree—the grower can make a net profit of $3.25 per tree or $4,225 per acre. That means a net return of $600 per acre per year for the seven-year cycle. But growers can obtain such returns only if everything goes well from the planted seedling to the marketed trees. Statistically, only about half of all tree farms ever develop trees of sufficient quality to reach the marketplace.

The wholesale value of the industry's production this year could approach $150 million, and retail sales might range between $300 million and $350 million. (Like everything else, Christmas trees seem to go up about 10 percent in price each year.) Ornaments and accessories add millions more to the total bill. According to industry sources, at least one-third of the nation's households are displaying natural Christmas trees this season, while perhaps one-fourth are displaying artificial trees—and the others are just looking in other people's windows.

Marketing trees

Although growers produce about 40 different types of Christmas trees, six different species account for about three-fourths of all sales. Most households generally purchase Scotch pine for their living rooms, but Douglas fir and balsam fir have grown sharply in popularity in recent decades. Cedar, spruce, and red pine are also favored by many buyers. Prices vary sharply from region to region, with the cost of freight being a major factor. Certain areas with heavy demand, such as New York City, can count on paying several dollars per tree just for the cost of freight. California is a major market for natural trees, importing about three million trees from the Northwest and Great Lake states, and buying about two million more from California tree farms. Many purchasers buy directly from about 600 "choose and cut" tree farms scattered around the state, while others rely on the more traditional street-corner and vacant-lot locations.

Retailers differ about the favored size of tree; some say that households are now buying larger trees, while others claim a growing popularity for smaller trees. (One major Northwest producer claims that only 30 percent of his trees are over six feet tall, while 26 percent are between five and six feet, and the other 44 percent are smaller.) But all retailers agree on the popularity of sheared (tapered) trees, which in the last several decades have increased from 5 percent to 80 percent of the Northwest's total production.

Will artificial trees ever replace natural trees? Not very likely, especially in view of the influence of the OPEC nations on this Christmas product. (Most artificial trees are made from petroleum-based plastics.) Many dealers now report a trend away from artificial trees, with their share of the total market dropping from about one-third of the total in pre-OPEC days to perhaps one-fourth of the total today. With oil prices soaring, many such trees are selling from $80 to $120 this season. The dominance of the natural product thus seems assured, so tree farmers should feel confident of finding a market a decade hence for many of the 90 million seedlings that they'll plant next spring.

William Burke

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BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 12/3/80	Change from 11/26/80	Change from year ago Dollar	Change from year ago Percent
Loans (gross, adjusted) and investments*	144,394	− 636	8,258	6.1
Loans (gross, adjusted) — total#	122,226	− 607	9,150	8.1
Commercial and industrial	36,294	− 429	3,912	12.1
Real estate	49,648	− 213	6,751	15.7
Loans to individuals	23,781	− 155	− 312	− 1.3
Securities loans	1,251	45	− 240	− 16.1
U.S. Treasury securities*	6,695	− 40	− 692	− 9.4
Other securities*	15,473	11	− 200	− 1.3
Demand deposits — total#	47,547	1,636	1,196	2.6
Demand deposits — adjusted	33,980	1,742	1,336	4.1
Savings deposits — total	29,149	7	454	1.6
Time deposits — total#	69,129	− 353	10,299	17.5
Individuals, part. & corp.	60,027	− 312	9,793	19.5
(Large negotiable CD's)	27,221	− 53	5,175	23.5

Weekly Averages of Daily Figures	Week ended 12/3/80	Week ended 11/26/80	Comparable year-ago period
Member Bank Reserve Position			
Excess Reserves (+)/Deficiency (−)	n.a.	n.a.	− 25
Borrowings	65	299	281
Net free reserves (+)/Net borrowed(−)	n.a.	n.a.	− 306

* Excludes trading account securities.

Includes items not shown separately.

Editorial comments may be addressed to the editor (William Burke) or to the author .... Free copies of this and other Federal Reserve publications can be obtained by calling or writing the Public Information Section, Federal Reserve Bank of San Francisco, P.O. Box 7702, San Francisco 94120. Phone (415) 544-2184.